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EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING	G DATE
MJS	4,063,106	12/ 13/77	Ashkin et al.	307	88.3		
MJS	4,685,107	8/4/87	Kafka et al.	372	6		
MJS	4,740,974	4/26/88	Byron	372	3		
MDS	5,039,199	8/13/91	Mollenauer et al.	359	334		
MJS	5,050,183	9/17/91	Duling, III	372	94		
ZCM	5,058,974	10/22/91	Mollenauer	385	27		
MJS	5,117,196	5/26/92	Epworth et al.	359	333		
MJS	5,132,976	7/21/92	Chung et al.	372	6		
MJS	5,134,620	7/28/92	Huber	372	6		70.4 71 10141511
MJS	5,191,586	3/2/93	Huber	372	6		
RUM	5,191,628	3/2/93	Byron	385	27		
MUS	5,218,655	6/8/93	Mizrahi	385	39		,
SCM	5,268,910	12/7/93	Huber	372	6		
2CM	5,295,016	3/15/94	Van Deventer	359	347		
RUS	5,323,404	6/21/94	Grubb	372	6		
RCM	5,359,612	10/25/94	Dennis et al.	372	18		
MUS	5,450,427	9/12/95	Fermann et al.	372	18		
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MJS	5,473,622	12/5/95	Grubb	372	6		
MJS	5,477,555	12/19/95	Debeau et al.	372	25		
MJS	5,479,291	12/26/95	Smith et al.	359	333		-
MJS	5,485,481	1/16/96	Ventrudo et al.	372	6		
MJS	5,497,386	3/5/96	Fontana	372	18		
MUS	5,504,771	4/2/96	Vahala et al.	372	94		
MJS	5,513,194	4/30/96	Froberg et al.	372	6		
MJS	5,521,738	5/28/96	Froberg	359	184		
MS	5,530,710	6/25/96	Grubb	372	6		
MJS	5,541,947	7/30/96	Mourou et al.	372	25		
R) S	5,542,011	7/30/96	Robinson	385	24		
MJ5	5,577,057	11/19/96	Frisken	372	18		
MUS	5,617,434	4/1/97	Tamura et al.	372	6		
W72	5,623,508	4/22/97	Grubb et al.	372	3		
MJS	5,659,559	8/19/97	Ventrudo et al.	372	6		
MJS	5,673,281	9/30/97	Byer	372	3		
MJS	5,734,665	3/31/98	Jeon et al.	372	6		
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гсm	5,757,541	5/26/98	Fidric	359	341		-
MJS	5,838,700	11/17/98	Dianov et al.	372	6		
MJS	5,841,797	11/24/98	Ventrudo et al.	372	6		
M72	5,847,862	12/8/98	Chraplyvy et al.	359	337		
SCM	5,861,981	1/19/99	Jabr	359	341		
MJS	5,880,866	3/9/99	Stolen	359	138		<del></del>
MJS	5,883,736	3/16/99	Oshima et al.	359	341		
MJZ	5,887,093	3/23/99	Hansen et al.	385	27		
MJS	5,920,423	7/6/99	Grubb et al.	359	341		
MJS	5,768,012	6/16/98	Zanoni et al.	359	341		
RLM	5,673,280	9/30/97	Grubb et al.	372	3		
MJS	5,659,644	8/19/97	DiGiovanni et al.	385	31		
MJZ	5,389,779	2/14/95	Betzig et al.	250	216		
MUS	5,323,404	6/21/94	Grubb	372	6		<del></del>
MSS	5,226,049	7/6/93	Grubb	372	6		
2CM	5,225,925	7/6/93	Grubb et al.	359	341		
RLM	5,825,520	10/20/98	Huber	359	130		
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	5,825,520	10/20/98	Huber	359	130		
MS	5,798,855	8/25/98	Alexander et al.	359	177		
MJS	5,726,784	3/10/98	Alexander et al.	359	125		
MJS	5,701,186	12/23/97	Huber	359	125		
MUS	5,659,351	8/19/97	Huber	348	7		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
2CM	5,600,473	2/4/97	Huber	359	179		
W 72	5,579,143	11/26/96	Huber	359	130		
MJS	5,557,442	9/17/96	Huber	359	179		
MJS	5,555,118	9/10/96	Huber	359	125		
MUS	5,532,864	7/2/96	Alexander et al.	359	177		
M2	5,504,609	4/2/96	Alexander et al.	359	125		
MJS	5,467,212	11/14/95	Huber	359	168		
MJS	5,416,629	5/16/95	Huber	359	182		
MJS	5,400,166	3/21/95	Huber	359	173		
MS	5,373,389	12/13/94	Huber	359	195		
M72	5,331,449	7/19/94	Huber et al.	359	125		
MJS	5,321,707	6/14/94	Huber	372	6		
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M)S	5,321,543	6/14/94	Huber	359	187		-
PCM .	5,301,054	4/5/94	Huber et al.	359	132		
MUS	5,295,209	3/15/94	Huber	385	37		
MJS	5,293,545	3/8/94	Huber	359	111		
MJS	5,283,686	2/1/94	Huber	359	337		
2CM	5,271,024	12/14/93	Huber	372	6		
MJS	5,257,124	10/26/93	Glaab et al.	359	124		
MJS	5,243,609	9/7/93	Huber	372	9		
M35	5,222,089	6/22/93	Huber	372	6		
MJS	5,212,579	5/18/93	Huber et al.	359	182		
M35	5,210,631	5/11/93	Huber et al.	359	132	'	
MJS	5,208,819	5/4/93	Huber	372	32		·
W72	5,200,964	4/6/93	Huber	372	26		
MJS	5,187,760	2/16/93	Huber	385	37		·
MJS	5,166,821	11/24/92	Huber	359	238		
MJS	5,159,601	10/27/92	Huber	372	6		
MJS	5,153,762	10/6/92	Huber	359	125		
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RUS	5,151,908	9/29/92	Huber	372	6		
MUS	5,140,456	8/18/92	Huber	359	341		
Mas	5,268,910	12/7/93	Huber	372	6		
MJS	5,107,360	4/21/92	Huber	359	124		
MJS	4,831,616	5/16/89	Huber	370	3		
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MJS	Sun, Y. et al., "8 November 6, 19	30nm Ultra-Wi 97, Vol. 33, No	deband Erbium-Doped Silicia Fit o. 23, pp. 1965-1967	bre Amplifi	er" ELECTRON	ICS LET	TERS,
M)5	Wysocki, P.F. e Period Grating I	t al., "Broad-Ba Filter", IEEE Pl	and Erbium-Doped Fiber Amplifi HOTONICS, Vol. 9, No. 10, Octo	ier Flattened ober 10, 199	d Beyond 40nm 97, pp. 1343-134	Using Lo	ong-
M)5	Liaw, S-K et al., Doped Fiber", II	, "Passive Gain EEE PHOTON	-Equalized Wide-Band Erbium-DICS TECHNOLOGY: LETTERS	Ooped Fiber S, Vol. 8, N	Amplifier Using o. 7, July 7, 1990	g Samariı 6, pp. 879	um- 9-881
MJS	Fluoride-Based	Er3+-Doped Fi	iber Amplifierin a Cascade Confi	Composed guration", I	of a Silica-Base EEE PHOTONI	ed and a	TERS,
MJS	NRZ Transmissi	"240-km Repe on", IEEE PHO	ater Spacing in a 5280-km WDM OTONICS TECHNOLOGY LET	1 System Ex TERS, Vol	speriment Using 10, No. 6, June	8x2.5 Gt 1998, pp	o/s o. 893-
MJS	Fiber Amplifiers	and Distrbuted	d Raman Amplifiers", IEEE PHO	mplification	with Erbium-D ECHNOLOGY	oped Flu LETTER	oride S, Vol.
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MJS	Masuda, H. et al	., "Wide-Band Pumped Ran	d and Gain Flattened Hybrid Fiber nan Amplifier", IEEE PHOTONIO	Amplifier (	Consisting of an	EDFA a ERS, Vol	nd a . 11,
MJS	Kawai, S. et al., Doped Fluoride No. 9, April 30,	Fibre Amplifi	75nm 3dB Gain-Band Optical Arer and Discrete Raman Amplificar-898	mplifier Util tion", ELEC	ising Gain-Flatt TRONIC LETT	ened Erb ERS, Vo	ium- ol. 34,
MJS	Kawai, S. et al., Fiber and Ramar	"Ultrawide, 75 1 Fiber", OFC	5nm 3dB Gain-Band Optical Amp TECHNICAL DIGEST, 1998 (	olifier Utilizi month unknow		ed Fluor	ide
M)5	Kidorf, H. et al., TECHNOLOGY	"Pump Intera LETTERS, V	ctions in a 100-nm Bandwidth Ra Vol. 11, No. 5, May 1999, pp.530-	man Amplif -532	ier", IEEE P#	<b>O</b> TONIC	5
MJS	Ono, H. et al., "C Wavelength Reg 598	Gain-Flattened ion", IEEE Ph	Er3+-Doped Fiber Amplifier for HOTONICS TECHNOLOGY LE	a WDM Sig TTERS, Vol	nal in the 1.57- . 9, No. 5, May	1.60-µm 1997, pp	.596-
MJS	Forward Error Co	orrection, and	nrepeatered Transmission at 2.488 Remote Post-and Pre-amplifiers I ERS ONLINE NO. 19951043, July	Pumped By	ng Dispersion C Diode-Pumped	ompensa Raman L	tion, asers",
MJS	Guy, M.J. et al., of Distributed Rama	"Lossless Trai an Amplificati	nsmission of 2ps Pulses Over 45k ion", ELECTRONICS LETTERS	m of Standa , Vol. 34, No	rd Fibre at 1.3μ o.8, April <b>(6</b> ,199	m Using 98, pp. 79	3-794
MJS	Dianov, E.M. et a No. 7, April 2, 19	al., "Highly E 998, pp. 669-6	fficient 1.3μm Raman Fibre ampl i70	ifier", ELEC	CTRONICS LET	TERS, V	/ol. 34,
MJS	Chernikov, S.V. No.7, April 2, 19	et al., "Raman 98, pp. 680-6	n Fibre Laser Operating at 1.24μm 81	ı", ELECTR	ONICS LETTE	RS, Vol.	34,
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	1		NICS TECHNOLOGY LETTERS, V			<u> </u>	
MJS			, Gain-Flattened, Erbium-Doped Fibr TTERS, Vol. 33, No. 12, June 5, 199			andwidt	is of
MJS			ion of Two-Pump Fibre Optical Para October 9, 1997, pp. 1812-1813	metric Aı	mplification", E	LECTRO	ONICS
MJS			vidth and Long-Distance WDM Trans OTONICS TECHNOLOGY LETTER				
MJS			n-Doped Fiber Amplifiers", IEEE JO . 7, July 1997, pp. 1049-1056	URNAL	OF QUANTUN	1	
			n Fibre Laser Operating at 1.24 µm"	ELECTR	ONICS LETTE	RS, Vol	34,
	No. 7, April 2, 1	998, pp. 680-	681				
MJS	Grubb, S.G. et al. 1996, pp. 127-13		an Lasers Emit at Many Wavelength	ıs", LASE	ER FOCUS WO	RLD, Fe	bruary
MJS	Mollenauer, L.F. OF AMERICA,		ersion-Managed Solitons for Terrestri th unknown)	iał Transr	nission", OPTIC	CAL SO	CIETY
MJS			nit in Erbium-Doped Fiber Amplifier ONICS TECHNOLOGY LETTERS,				-561
MJS			spects of Raman Fibre Amplifiers", 7, Pt. J, No. 4, August 1990, pp. 221		L AMPLIFIERS	SFOR	
MJS			liton Propagation in Long Fibers with ELECTRONICS, Vol. QE-22, No. 1,				, IEEE
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MJS	WO 98/20587	5/14/98	PCT	H01S	3/30		
MJS	0 903 876 A1	3/24/99	Europe	H04B	10/17		
MJS	0 936 761 A1	8/18/99	Europe	H04B	10/18		
	OTHER DO	CUMENTS (	Including Author, Title, Date, P	ertinent P	ages, Etc.)	·	·
MJS	Multiplexed Opt	tical Commun	tion of Stimulated-Raman-Scatteri ication Systems by Series or Paral o. 3, pp. 958-963 (March)	ng Cross lel Technic	Talk in Waveleng ques", OPTICAL	gth-Divis SOCIE	ion- ΓΥ OF
M72	Hansen, P.B. et PHOTONICS T	al., "Rayleigh ECHNOLOG"	Scattering Limitations in Distri by LETTERS, Vol. 10, No. 1, Janu	uted Rama ary 1998,	n Pre-Amplifiers	s", IEEE	
MJS			Amplification Characteristics in l IS, Vol. 39, No. 3, 1981, pp. 148-			lica Fibei	·s",
MDS			ce Degradation Due to Stimulated tems", ELECTRONICS LETTER				
MJS		tems via Spec	ory of Stimulated Raman Scatterin tral Inversion", IEEE PHOTONIC 1-1273				
MJS			nter-Pumped Small-Signal Fibre R March 27,1997, pp. 607-608	aman Amı	olifiers", ELECT	RONICS	
MJS	Stolen, R.H. et a March 15, 1973,	l., "Raman Ga pp. 276-278	in in Glass Optical Waveguides",	APPL. PH	IYS. LETT. Vol.	22, No.	6,
MJS			ent of the Stimulated Raman Spec ERICA, Vol. 1, No. 4, August 198			Fibers",	
MJS	Nissov, M. et al. Amplification",		0x10Gb/s) WDM Transmission C	ver 7200 l	m Using Distrib	uted Ran	nan
M72			/s Distributed Raman Amplification n Region over 640km of 1.55-μm				
EXAMINER	M. Stahl		DATE CONSIDERED	4/14/0	13		·

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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